

Non-CALC Part

Supercorrection Form

Name: Ellen FD

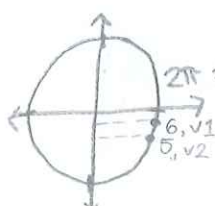
3b. Convince me that you now understand the concept. Make connections and build on the problem if possible; be sure to explain the error(s) that you made.
Original 2/4 Supercorrection 4/4

b. $\sin(5) \square \sin(6)$ Sine's output is the y-coordinate on the unit circle. So, I should've approached this graphically by using the unit circle to determine. Again, I should've used 2π to determine that 1 full rotation is roughly 6.28. So, with that, I could've used the values 5 and 6 to show which had a higher y-coordinate. So, my main error was trying to figure it out on the sine graph, which confused me as I put $\sin(6)$ as being closer to the x-axis. I could've used that method properly as below:

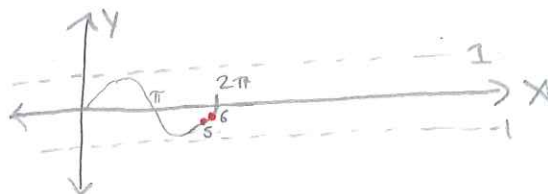
Correct solution:

b. $\sin(5) \square \sin(6)$

Unit Circle-



Graphically-



Cedric helped!

In both, $v1$ would be greater than $v2$ because it is higher on the y-axis, and therefore, would have a greater y-value.

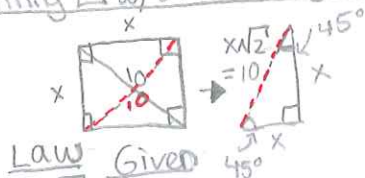
Very good!

5b. Convince me that you now understand the concept. Make connections and build on the problem if possible; be sure to explain the error(s) that you made.
Original 2/4 Supercorrection 4/4

This was an error on a simple problem where I had several different approaches to finding the answer. I understand the special right triangle rules and know that \triangle is given, the hypotenuse is equal to $x\sqrt{2}$. With that, I ended up (for some reason) writing $x = 10\sqrt{2}$. However, I had been solving for the diagonal and even did that wrong. I should've known that what I did was an error because the diagonal was equal to 10, and with that, it had to be equal to $x\sqrt{2}$. 10 was not the input for x, as I had put.

Correct solution:

Splitting \square w/ other diagonal-

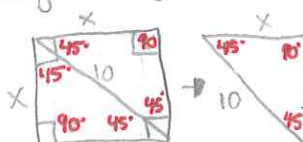


Law Given
 $x\sqrt{2} = 10$

$x = \frac{10}{\sqrt{2}} \approx 7.07$

(the way I had tried)

Using the angles/side ratios

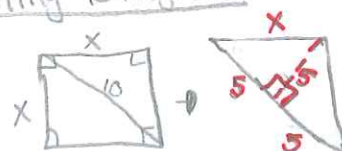


$\sin(45) = \frac{x}{10}$

$10 \sin 45 = x$

$x \approx 7.07$

Splitting Diagonals-



★ (The diagonals of a square intersect perpendicularly)

$5^2 + 5^2 = x^2$

$50 = x^2$

$\sqrt{50} = x$

$7.07 \approx x$

Cool! 3 ways!

My favorite!